California Department of Health Services
Drinking Water Field Operations Branch

TMF Capacity Assessment Form for Community Water System SDWSRF Applicants

Water System Name:	**System Number:**

Person completing this assessment: _____
Name

_____
Title

_____
Signature

_____
Date

SDWSRF Pre-Application Project Number(s): _____

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Background & Instructions

The 1996 Federal Safe Drinking Water Act requires each state that establishes a Safe Drinking Water State Revolving Fund (SDWSRF) Program to assess the Technical, Managerial, and Financial (TMF) Capacity of each applicant applying for funding. Federal law prohibits states from providing any SDWSRF Program assistance to a public water system that does not have the TMF Capacity to ensure compliance with applicable Safe Drinking Water Act laws and regulations. However, Federal law allows states to provide SDWSRF Program assistance to water systems that do not have sufficient TMF Capacity as long at the capacity can be developed and the water systems agree to take the necessary actions to develop the capacity.

This form will be used by the Department to assess the TMF Capacity of SDWSRF Program applicants. **Each public water system that is invited to submit a SDWSRF Program application must complete this form**. Upon request the Department will provide assistance to complete the application or forms. Failure to complete and return the form to the Department will prevent the Department from assessing the TMF Capacity of that public water system and effectively prohibit the Department from providing that water system with any project funding from the SDWSRF program.

All public water systems applying for SDWSRF Program funding assistance must possess some elements of TMF Capacity before the SDWSRF Program can make an offer of funding. These elements are labeled "*Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance)*" in this form. Other elements are not necessary at the time of application but must be developed by the water system within an agreed upon time frame. These

elements are labeled "*Capacity Elements Required to be Developed*" in this form. **Even though these capacity elements are not required at the time of application, adequate information must be submitted to enable the Department to assess a water system's ability to comply**.

The Department is committed to helping systems qualify for SDWSRF funding. Small water systems that cannot demonstrate adequate capacity will be provided with direct assistance in order to develop the needed capacity. **In order to process the application, the TMF Assessment must be completed. If assistance is needed, it is critical that all information that the Department requests is provided in a timely manner.**

HELPFUL HINTS: This form asks you to submit a number of attachments. If you have already provided this information to the Department, or to your local County Environmental Health Department, use the space provided for comments to indicate when and how it was submitted. You may contact the local Department office or County Environmental Health Department if you have questions about whether items you have submitted fulfill the requirements contained in this form. The applicant should fill out this form to the best of their ability prior to meeting with assistance provider.

Technical Capacity - Mandatory

A. System Description

Helpful Hint: Check with regulator to see if adequate system map is already on file.

"As-built" maps or drawings that show the location of all of the facilities in the system and maps that show the existing and future service areas, sources of supply and contamination hazards, and other critical facilities are essential to the operation of any water system. To be useful beyond the date they are prepared, the water system should have a method to keep the maps updated as changes occur. Knowing the location, type of materials, etc., of water mains or other facilities is necessary in order to check, repair or replace them. Similarly, it is essential during an emergency to know where the isolation valves are.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance)

The items listed below **must be submitted with this form** as part of the final SDWSRF application. Check the box next to each item submitted with this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

Map(s) that show:

1 ☐ Current service area.

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2 ☐ Location of existing and proposed facilities (e.g. each water source, treatment facility, pumping plant, storage tank, and pressure zone in the system, as well as distribution system piping).

3 ☐ *For systems expanding their service area*: Projected ten-year service area.
☐ *Not Applicable*

4 ☐ *For New Systems*: Proposed service area and system facility locations.
☐ *Not Applicable*

5 ☐ *For systems undergoing consolidation (connecting to another public water system)*: Proposed consolidated (combined) service area and facilities.
☐ *Not Applicable*

6 ☐ A description of "as-built" plans or drawings that are maintained by the water system and a procedure to be used to ensure as-built drawings are prepared and maintained for all new facilities. As-built drawings of new facilities must be drawn to scale, show location, size, construction material and year of installation of each water main or other facility.

Comments _____

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B. Technical Evaluation

Section 116555 of the California Health and Safety Code requires that a public water system provide a reliable and adequate supply of pure, wholesome, healthful and potable water at all times. A technical evaluation of the physical facilities and of the operation of the system is essential in order to assess the capacity of the system to reliably meet drinking water standards and to properly budget for needed improvements. The technical evaluation will also assess the need for additional facilities to accommodate growth over the next ten years. All public water systems applying for SDWSRF funds must also evaluate connecting to a nearby existing public water as an option to resolve the problem.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance)

1. Consolidation Feasibility

The items listed below **must be submitted with this form** as part of the final SDWSRF application. Check the box next to each item submitted with this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

20 ☐ An evaluation of the feasibility of consolidation with other water systems, which must include:

21 ☐ Identification of all existing public water systems located within one mile of the water system. ☐ *Not Applicable, no public water system within one mile*

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22 ☐ Description of the feasibility of incorporating into an existing water system or being owned, operated or managed by a satellite agency.

C. Certified/Qualified Operators

The California Code of Regulations, Title 22, requires certified operators for public water systems. In addition, all public water systems must be under the operational control of an appropriately certified or qualified operator in order to assure reliable compliance with drinking water standards.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance):

The items listed below **must be submitted with this form** as part of the final SDWSRF application. Check the box next to each item submitted with this form.

50 ☐ *For water systems where treatment is provided or proposed as part of the SDWSRF project*: Documentation of appropriately certified operator(s) who are responsible for the operation of the water system and treatment facilities.

Does the water system currently have a state certified operator?

☐ Yes ☐ No

If Yes, attach name, grade and certification number of each operator.

51 ☐ For water systems where no treatment is provided: Provide the name and a copy of the Distribution Operator's certificate, in accordance with state regulations, Title 22, Sections 63750.10 - 64413.7 for the person(s) operating the water system.

52 ☐ *If the operators have not been hired*: Provide a plan and schedule for hiring the required certification grade or qualification of operator.

53 ☐ A description of the relevant training and experience of persons responsible for the operation of the water system.

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Managerial Capacity - Mandatory

D. Ownership

In order to determine accountability for compliance with California SDWA requirements, the owner(s) of the water system must be clearly identified. It is also essential that the system demonstrate that they own or control the facilities necessary for the operation of the system.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance):

The items listed below **must be submitted with this form** as part of the final SDWSRF application. Check the box next to each item submitted with this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

56 ☐ Description of the type of system ownership (e.g., sole proprietorship, partnership, corporation, mutual, governmental agency) along with the name(s), address(es), and phone number(s) of the owner(s).

57 ☐ List of any public water systems that are or have been owned by the applicant (solely, in partnership, or as a corporation, etc.). ☐ *Not Applicable*

58 ☐ List of any public water systems that the applicant previously operated or is currently operating under contract for another owner or entity. ☐ *Not Applicable*

60 ☐ *Systems that use, but do not own, land or facilities that are essential to water system operation:* Term(s) of agreement for the long-term use of land or facilities not owned by the system. ☐ *Not Applicable*

61 ☐ *Systems with a single proprietor:* A contingency plan for continuing operations in the event the owner becomes incapable of carrying out his/her responsibilities. ☐ *Not Applicable*

62 ☐ Disclosure of any encumbrances, trust indentures, bankruptcies, decrees, legal orders or proceedings, or other items that may affect or limit the owner's control of the water system.

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E. Organization

A clear description of the organization including a functional organization chart is essential for every water system. This establishes the lines of authority and communication between employees and management and helps to avoid confusion, mistakes, or misunderstandings in the daily operation and management of the system. It is also essential to define the respective roles of each person to avoid duplication and confusion, and to ensure that all essential functions are covered.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance):

The items listed below **must be submitted with this form** as part of the final SDWSRF application. Check the box next to each item submitted with this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

63 ☐ Organization chart for the water system.

64 ☐ A complete description of the reporting relationships and primary responsibilities of all key personnel that will be involved in the management or operation of the water system (including boards of directors or councils, employees and contract personnel). This includes name(s), position(s) and title(s) of those responsible for establishing policies, for ensuring compliance with state regulatory drinking water requirements, and for day to day operation of the water system.

65 ☐ *For systems with boards or councils:* Frequency of meetings. ☐ *Not Applicable*

66 ☐ A description of the relevant training and experience that persons responsible for the management of the water system have received.

67 ☐ A description of how legal, engineering, and other professional services will be provided.

68 ☐ *If the person in charge of system operation has other responsibilities unrelated to the water system:* Description of these other responsibilities and how much time is dedicated to the operation of the water system. The system Operations Plan may be used as part of this demonstration. ☐ *Not Applicable*

69 ☐ *Systems that contract for system management or operation:* The contract between the water system and the contractor, showing the contractor's duties and responsibilities and the amount of time to be spent performing the specified duties. ☐ *Not Applicable*

Comments _____

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F. Water Rights

Water systems must demonstrate that they have a legal right to the quantity of water necessary to assure an adequate and reliable drinking water supply. A copy of any documentation showing the water right should be maintained as part of the system records.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance):

The items listed below **must be submitted with this form** as part of the final SDWSRF application if they are applicable to the water system source(s). Check the box next to each item submitted with this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

70 ☐ *If the source of water for the system is groundwater from an unadjudicated basin, check this box. No additional documentation is required.*

71 ☐ Information that describes the legal basis and authority for diversion or extraction of water. This may include documents such as permits, licenses, or other agreements showing all water rights owned or controlled by the system, or a letter of confirmation from the authority that granted each of the water rights held by the system. ☐ *Not Applicable*

72 ☐ *If the source water is subject to permit requirements under the State Water Resources Control Board*: A copy of the water rights permit. ☐ *Not Applicable*

73 ☐ *If water is pumped from an adjudicated groundwater basin:* Documentation of approval for extraction of water from the basin watermaster. ☐ *Not Applicable*

Comments _____

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Financial Capacity-Mandatory

G. Budget Projection

The budget projection is a written financial plan for the operation of the water system over the next five years. This is a critical feature of the TMF Capacity assessment because it indicates whether the system's revenues and reserves will meet the water system's expenses. It also is a necessary tool that will enable the water system to plan for future needs.

Capacity Elements Required Prior to Issuance of the NOAA (Notice of Application Acceptance):

The items listed below **must be submitted with this form** as part of the final SDWSRF application. Check the box next to each item submitted with this form.

82 ☐ Five-year projection of anticipated revenues and expenditures for the system. The budget projection shall include maintenance of an equipment replacement reserve. The projection must also include the projected receipt of loan monies from the SDWSRF program, as well as the expenses for completion of the SDWSRF project.

The budget projection must also include the projected expenses to be incurred as a result of implementing the water system's Capital Improvement Plan and its equipment replacement schedule.

83 ☐ The water system's consolidated financial statement (e.g., balance sheet and income statement) from the previous three fiscal years.

84a ☐ A copy of the current rate structure and the average annual cost of water per customer for the last calendar year.

84b ☐ The proposed rate structure and estimated average annual cost of water per customer based on the SDWSRF loan amount.

Comments _____

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Technical Capacity - Necessary

H. Source Capacity Assessment and Evaluation

The purpose of this element is to have each community water system evaluate their anticipated growth and water demand and compare this to the existing capacity of their sources and system to deliver water. This element will allow a water system to understand when changes or additions to their sources are needed and plan accordingly given the lengthy time for developing a new source of supply due to water rights, environmental review and permit requirements.

Capacity Elements Required to be Developed:

The items listed below do not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system already has any

of the items listed below, check the appropriate boxes and attach the items to this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

7 ☐ A ten-year growth projection of the water system service area and customer base that is consistent with local land use plans.

8 ☐ A ten-year projection of water demand.

9 ☐ An analysis of the capacity of the water source(s) to meet the current and projected demand. The analysis must contain the following information:

10 ☐ Documentation of the amount of water needed to meet current annual and maximum day demand.

11 ☐ Estimates of the amount of water needed to serve the annual and maximum day demand over the projected ten-year growth period.

12 ☐ A description and yield analysis for each *surface water source* that is currently being used or that is proposed to be used to meet the projected water demand on the system. ☐ *Not Applicable, using groundwater only*

13 ☐ Description of each *groundwater source* that is currently used or proposed to be used to meet the projected water demand, including groundwater levels, draw down patterns and sustained well yield. ☐ *Not Applicable, using surface water only*

14 ☐ Existing source pumping and conveyance capacity, including raw and finished water storage capacity.

15 ☐ A plan and schedule to obtain additional water rights, if needed, to serve customer growth for at least the next ten years.
☐ *Not Applicable, no additional capacity needed*
☐ *Not Applicable, using an unadjudicated groundwater basin*

16 ☐ *For proposed sources*: Provide a characterization of the water quality, including a comparison with established or proposed drinking water standards.

17 ☐ Procedures to assess increasing concentrations in water quality parameters from an evaluation of source water quality monitoring data.

18 ☐ A map of the location, and written documentation of, all major sources of contamination, actual or potential, within the service area or in adjacent areas that could affect the system sources (e.g., waste disposal sites, landfills, feedlots, etc.).

Comments _____

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I. Technical Evaluation - *Capacity Elements Required to be Developed*:

Helpful Hint: DHS inspection reports may help document this.

The items listed below do not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system already has any of the items listed below, check the appropriate boxes and attach the items to this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

23 ☐ A technical evaluation of the water system facilities with respect to its capacity to reliably meet current and proposed drinking water standards. The evaluation must:

24 ☐ Document the water system's ability to comply with the California Waterworks Standards contained in Chapter 16, Title 22, of the California Code of Regulations.

25 ☐ Assess all existing and proposed treatment facilities for compliance with applicable regulations, e.g., the Surface Water Treatment Regulations. This assessment must address all regulatory requirements that apply, as well as the treatment facility's ability to reliably produce water that meets the appropriate water quality standards. The capacity of each unit process at a treatment plant must be assessed to determine the limiting flow through the treatment plant. ☐ *Not Applicable, no treatment provided or proposed*

26 ☐ Assess the source, storage, and distribution system's design capacity and operational ability to maintain the pressure specified in the California Waterworks Standards, Chapter 16, Title 22, of the California Code of Regulations, throughout the distribution system under daily demand fluctuations, peak daily and peak monthly demands. This assessment must include fire flow if the system is used for fire protection.

27 ☐ *If the water system is proposing to expand its existing distribution system within the ten-year planning period, or is currently experiencing pressure problems:* A hydraulic analysis of the impacted areas of the transmission and distribution system, to ensure reliable compliance with pressure standards under maximum demand conditions. ☐ *Not Applicable*

A pressure survey of the water system would be an acceptable alternative to the hydraulic analysis as long as the plan for conducting the survey is approved by the Department before the survey is conducted.

28a ☐ Show that the water system has the ability to accurately and continuously measure the quantity of water produced from each water source, with the exception of emergency or standby sources, in order to determine total production. The information provided must document the type of flow meters used as well as the routine procedures carried out to ensure their accuracy.

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28b ☐ Describe the design basis of all water system facilities to be constructed using SDWSRF program funding. ☐ *Not Applicable*

29 ☐ An evaluation that identifies all critical facilities and/or equipment whose failure would result in a water outage and/or a water quality failure and the adequacy of the water system's plans/procedures for dealing with such failures.

31 ☐ An evaluation of the condition and remaining service life of existing facilities.

32 ☐ A prioritized list of deficiencies and needed system improvements to serve as a basis for a five year Capital Improvement Plan.

Comments _____

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J. Operations Plans

Helpful Hint: Contact regulatory staff, this may not be required up-front, additional time may be allowed to complete this.

A comprehensive water system operations plan is necessary to ensure that all operations personnel (full time, part time, on call, and new employees) have a standard set of procedures for the routine operation the water system. Systems providing any type of water treatment are required to develop a treatment plant Operations Plan. Water system managers should develop the system Operations Plan with operating personnel and establish procedures to review all plans annually with operators.

Capacity Elements Required to be Developed:

The items listed below do not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system already has any Operations Plans that include any of the elements listed below, check the appropriate boxes and attach the plans to this form. Please check the boxes marked '*Not Applicable*', if appropriate, so we know those items were addressed.

33 ☐ *For systems utilizing a surface water source*: A Department-approved SWTR Operations Plan. ☐ *Not Applicable, not using surface water*

34 ☐ *For systems providing any other water treatment (including chlorination)*: A Department-approved treatment plant Operations Plan, which should address process monitoring, response to violations, and reporting. ☐ *Not Applicable*

35 ☐ A system Operations Plan that addresses how the water system will be operated to comply with drinking water requirements and the California Waterworks Standards. The plan must address the following items:

36 ☐ Daily operational practices.

37 ☐ Emergency operational practices.

38 ☐ Flushing dead-end mains.

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39 ☐ Storage tank inspection and cleaning.

40 ☐ Main repair and replacement.

41 ☐ Consumer complaint response procedures.

42 ☐ Maintenance and testing of backflow prevention devices.

43 ☐ Inspecting and exercising water main valves.

44 ☐ Maintenance of master flow meters.

45 ☐ Responsibilities of operating personnel.

46 ☐ Operation of all production, transmission and distribution facilities.

47 ☐ Record keeping.

48 ☐ A maintenance plan for all facilities to be constructed under the Drinking Water State Revolving Fund program.

49 ☐ Procedures to review and update all Operations Plans every five years.

Comments _____

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K. Training

Competent management and operation of a public water system is critical in providing a safe and reliable water supply to system customers. In order to competently comply with existing requirements and stay current with new requirements, new technologies, and newly identified hazards, all water system personnel must be committed to maintaining an adequate level of continuing education. The information required in this Capacity element can be incorporated into the water system's Operations Plan.

Capacity Elements Required to be Developed:

The items listed below do not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system already has any of the items listed below, check the applicable box and attach them to this form.

54 ☐ A plan for keeping the system *management* current with the requirements of managing the water system.

55 ☐ A plan for keeping the system *operator(s)* current with the requirements of operating the water system.

Comments _____

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Managerial Capacity - Necessary

L. Emergency/Disaster Response Plan

In order to provide reliable service and to minimize public health risks from unsafe drinking water during emergencies, water systems should have a plan that defines how it will respond to emergencies and disasters that are likely to affect its operation.

Capacity Elements Required to be Developed:

The item listed below does not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system already has a plan which includes any of the elements listed below, check the appropriate boxes and attach the plan to this form.

75 ☐ An Emergency/Disaster Response Plan. The plan must address the following items:

76 ☐ All disasters and emergencies that are likely to occur in the water system's service area. As a minimum, all water systems must address earthquake and major fire emergencies. Other potential emergencies that may occur in a water system's service area include flooding, water outages, process control failures, and water contamination.

77 ☐ Designation of responsible personnel; an outline of the reporting chain of command; and identification of the responsibilities of personnel during the emergency/disaster.

78 ☐ Inventory of system resources that are used for normal operations and available for emergencies. This information should include maps and schematic diagrams of water system facilities (including distribution piping, shutoff valves, and other critical facilities); lists of emergency equipment; equipment suppliers; emergency contract agreements; and emergency water interconnections and/or sources.

79 ☐ A communication network that describes a designated location for an emergency operations center; emergency contact information for equipment suppliers; emergency phone and radio communication capabilities; coordination procedures with governmental agencies for health and safety protection, technical, legal and financial assistance; and public notification procedures.

81 ☐ Emergency procedures to quickly assess damage to water system facilities; provide logistics for emergency source activation and repairs; monitor progress of repairs and restoration; communicate with health officials and water users; and document damage and repairs.

82 ☐ Steps that will be taken to resume normal operations and to prepare and submit reports to appropriate agencies.

Comments _____

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Financial Capacity-Necessary

M. Budget Control

The budget of a water system is basically a financial plan for the existing and future operation of the water system. It is essential that the budget be adhered to or consciously modified to reflect major changes in the proposed budget. In order to accomplish this, the water system must establish budget controls and procedures for reporting to appropriate levels of authority. There must be periodic reviews of the budget status and modification of the budget, if necessary. This will ensure that revenues are collected, expenses are controlled, and reserve accounts are maintained.

Capacity Elements Required to be Developed:

The items listed below do not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system already has any of the items listed below, check the appropriate boxes and attach the items to this form.

89 ☐ A description of the water system's budget control and reporting procedures.

90 ☐ A description of the procedures established by the water system to prevent any commingling of revenue sources that is prohibited by state or federal law.

Comments _____

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N. Capital Improvement/Equipment Replacement Plan

In order to provide a continuous supply of potable water to its customers, every water system must have the capacity to make needed capital improvements and replace equipment in a timely manner. The development of a prioritized Capital Improvement Plan (CIP) is a common way for utilities to demonstrate this capacity. Improvements would be those necessary to resolve deficiencies identified in the technical evaluation as well as those necessary to accommodate growth in the system's service area. The financing plan for the CIP is then reflected in the system's operating budget in order to fully assess the financial capabilities of the water system.

Capacity Elements Required to be Developed:

The items listed below do not have to be submitted at the time of application but must be developed within an agreed upon time frame. However, if the water system has a Capital Improvement Plan, check the boxes and attach the information to this form.

87 ☐ A prioritized Capital Improvement/Equipment Replacement Plan. This CIP should be reflected in the five-year budget projection (Capacity Element K, page 7). Any facilities requiring construction within the five-year budget projection period should be identified with the proposed sources of funding.

88 ☐ Description of the method that the water system will use to develop the funds necessary to replace old and outmoded equipment, facilities, and pipes in the system. The estimated useful life of major system components must be specified.

Comments _____

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